

A Work Project, presented as part of the requirements for the Award of a Master Degree in Finance from the
NOVA – School of Business and Economics.

NOMAD FOODS EQUITY RESEARCH
GROWTH WITHIN CRISIS

PEDRO MIGUEL FARIA BARROSO BALDAIA
MORAIS – 40720

A Project carried out on the Master in Finance Program, under the supervision of:

Professor Francisco Martins

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Abstract

This Work Project presents a Nomad Foods Equity Research, which is one of the frozen food leaders in Europe. This report aims to forecast the company's future, and value it based on its expected cash flows. Nomad Foods benefitted from the current pandemic outbreak, as lockdowns brought the need for durable and convenient products, and therefore, its future performance might be contingent on the short-term development of the COVID-19 vaccine, as well as the evolution of cases and government measures regarding lockdowns. Thus, a "HOLD" position was recommended, with a target price of \$27.63 for December 31, 2021.

Keywords: Frozen Food, COVID-19, Lockdown, Vegan.

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This report is part of the “Nomad Foods Equity Research – Growth among global crisis” report (annexed) and should be read has an integral part of it.

Valuation

Value Drivers

Fundamental valuations, such as the Discounted Cash Flows model, are determined by a series of factors and assumptions that build a forecast of the company's operations. To be more accurate and objective among all these assumptions, the revenues forecast, and thus, its revenue key drivers, must be well selected. In Nomad Foods' case, the most appropriated way to build the revenues forecast was by breaking down the whole company by the frozen sub-industries in which it operates (ready meals, soup, baked goods, processed fruit and vegetables, processed meat and seafood, and rice, pasta, and noodles) and calculating its market share in each of these sub-industries.

After having the historical breakdown of revenues based on sales, industry market size, and industry market share, it was easier to forecast Nomad Foods' future income in each of its sub-industries. These assumptions were made using global market data, consumer trends, worldwide news, and Nomad Foods' management board decisions and expectancy.

Forecasting

▪ Revenues Forecast

When thinking about Nomad Foods revenues' forecast, one must think about the main topics affecting the company's performance. Its products benefit from characteristics that are its convenience, its recognized quality, and its durability. In the current global events, where COVID-19 is negatively affecting several businesses, Nomad Foods is increasing its performance and enhancing its brand awareness. With this, within all the frozen sub-industries in which the company operates, it was decided to explain further those that are thought to be the core for the business and the most sensitive ones with the current pandemic outbreak.

In its base case scenario, this analysis must have as its basis assumptions regarding what the prospects from 2020 onwards were. In 2020, due to COVID-19, several countries went through lockdowns, and narrowing the analysis into Europe, few were the countries that did not issue lockdown restrictions to its population. Due to these lockdowns' nature, people were forbidden to go to retail stores, cinemas, and, most importantly, restaurants. On the other hand, people were only allowed to go to supermarkets and work offices (even the latter with restrictions), which immediately impacted the way people behave and their regular living habits.

One of the most important and noticeable impacts was in the way people eat. Not that long time ago, before the pandemic, it was very typical to go to a restaurant with family or friends. Moreover, it was customary to have lunch outside during its work lunchtime. During lockdowns, this was not possible, and people had to rethink and adapt to different circumstances that were affecting their daily life. Even after lockdowns, people say their freedom is constrained, and everyday habits were not as easy to maintain. Due to this abnormal outlook, Nomad Foods can have its business enhanced, as its products perfectly match those that are the current population needs regarding eating habits. Its products offer people the possibility to buy, for example, a frozen meal that is

similar to the one that one would have at a restaurant. Moreover, it offers people the possibility to buy one product and consume it after weeks or even months, in some cases. Convenience is something that is much appreciated in today's society. Not only COVID-19 brought this need, but also the continually changing way of living. As mentioned before, the worldwide population is now living a more fast-paced life, and specific demographic cohorts such as millennials are aging, bringing with them their lifestyle habits.

A reasonable forecast regarding the foreseeable future was obtained with all these factors, and some assumptions were taken regarding the European frozen foods sector. First of all, it was assumed that, at least, all the frozen foods sub-industries were to grow at least double of its last year's real growth, given the COVID-19 impact in the consumption of the frozen food. Furthermore, it was also assumed that, in the base case scenario, this abnormal real growth only happened in 2020. For 2021, it was assumed that all sub-industries would be penalized with negative real growth. The reason for this last assumption has to do with the fact that, in 2021, it is not expected that countries can sustain such heavy lockdowns as one saw in 2020, having their economies negatively affected with damages that can be very difficult to reverse. Moreover, it is also expected that people are generally more likely to return to restaurants, having the possibility to enjoy something that was forbidden for an extended period. From 2021 to 2025, it was assumed that all the sub-industries would have a real growth that is equal to their average historical real growth (2015-2019), as there were no strong reasons to forecast it differently. From 2026 until the perpetuity, it was assumed that the European frozen foods sub-industries were to grow at 1.89%, which is the average real GDP growth from 1980 until 2019¹. All the analysis made until this point was considering real market values, net of inflation, using as inflation rates until 2019 the historical ones². For 2020 and 2021, it was used the expected inflation rates, respectively 0.62% and 1.21%. From this period onwards, the most rational assumption was to use the European Central Bank's projected inflation rate of 2%³.

Figure 1 - Frozen Seafood (€ million)

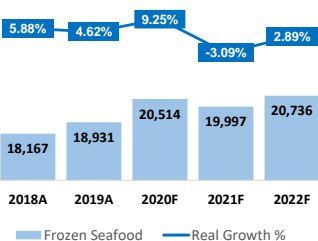


Figure 2 - Frozen Meat & Poultry (€ million)

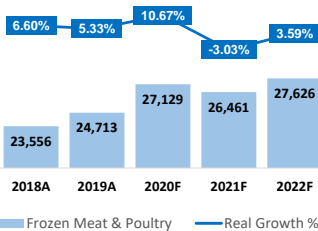
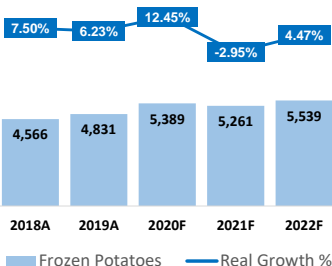


Figure 3 - Frozen Potatoes (€ million)



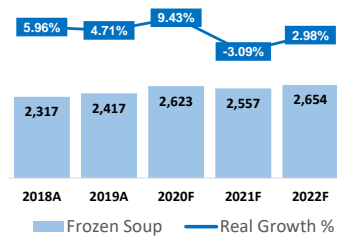
The analysis was made for all the considered sub-industries, but some did not have relevant points in which the analysis could change, and therefore, it was assumed that they would behave in the same way as the assumptions previously mentioned. This was the case of the European frozen seafood market, frozen meat and poultry, frozen potatoes, and frozen soup. The European frozen seafood market had a real market size of €18,662 million in 2019 and, with an expected real growth of 9.25% in 2020, it would reach a real market size of €20,388 million in 2020. Regarding the European frozen meat and poultry market, its real market size was €24,363 million in 2019, and with an expected real growth rate of 10.67%, it would reach a real market size of €26,962 million in 2020. The European frozen potatoes' real market size was €4,762 million in 2019, and with an expected real growth rate of 12.45%, it would reach a real market size of €5,356 million in 2020. Finally, the frozen soup's real market size was €2,382 million in 2019, and with an expected real growth rate of 9.43%, it would reach a real market size of €2,607 million in 2020. These previously covered sub-industries are considered to grow at the previously mentioned assumptions – with the 2020 real growth being the double of its 2019 real growth. Yet, the next two sub-industries require specific attention.

¹ World Bank. 2020. "GDP growth (annual %) – European Union". Retrieved from World Bank database <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=EU>

² Statista. 2020. "Inflation rate in the European Union and the Euro area from 2009 to 2021". Retrieved from Statista database <https://www.statista.com/>

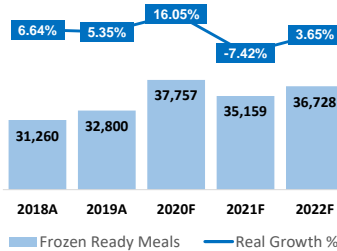
³ European Central Bank. 2020. "Monetary policy". Accessed November 21. <https://www.ecb.europa.eu/mopo/html/index.en.html>

Figure 4 - Frozen Soup (€ million)



Both the frozen ready meals market and the frozen vegetables and fruits are where the higher real growth is expected. Starting with the frozen ready meals, its real growth is expected to be three times higher than the one in 2019. The reason for this assumption is that, as previously mentioned, people were forbidden to go to restaurants for an extended period, and new lifestyle habits are becoming a reality among different demographic cohorts. As people could not go to restaurants, and as their daily life during 2020 was much more restrained than before, it is expected that their way of facing the 'new reality' is different. One of those differences consists of the way people eat. Looking for similar meals to those present in restaurants is something that is expected to happen. Currently, there are plenty of supermarkets and retailers' options from where consumers can choose from. Moreover, circulation restrictions are also expected to have an important role in consumers' choices regarding food products. As the whole world is facing a pandemic that has been increasing its size all over the past months, self-consciousness regarding how many times should one leave him/her house to go shopping plays a critical role. With this, it is also expected people to buy products that have quality and present two characteristics that are likely to be much appreciated over the next years, which are durability and convenience. Several sources point to huge growth for this specific market⁴, as people feel the need to have this kind of product at home during this abnormal period. The expected real growth for the European frozen ready meals market for 2020 is 16.05%, making its real market size grow from €32,335 million in 2019 to €37,525 million in 2020.

Figure 5 - Frozen Ready Meals (€ million)



Regarding the European frozen vegetables and fruits market, an extremely high real growth is also expected. Frozen vegetables do not only cover vegetarian and vegan habits, but they are a big part of it. The number of vegetarians and vegans have been increasing worldwide, and Europe is not an exception. Among Europe, the number of vegan businesses in 2019 was 11,655, which is 93% higher compared to 2016. Moreover, a survey conducted in Europe in 2020 stated that 4% of its consumers were already into a vegan diet⁵. Narrowing the analysis into the frozen food industry, the same behaviors regarding frozen ready meals are expected. Everyone is facing the same reality, and the demand for convenient and durable food is at its peak in the current days, which is why people are recurring to frozen food. Moreover, frozen vegetables are often recognized as the ones that better conserve their nutrients when compared to fresh, as most of them are packed in their best state⁶. A report also suggests that vegan consumers are driving this sub-industry growth⁷, since there is a high demand for frozen vegetables, not only because the number of vegans is increasing every year, but also because consciousness regarding eating habits is crucial in consumers nowadays. Consumers are becoming more aware of what impact their day-to-day routines can have on the environment, and eating habits are important. The debate regarding meat consumption and meat production is always present, and more people are changing to plant-based meat alternatives. Companies have this in mind and are trying to meet this demand, bringing innovative vegan alternatives. For these reasons, the expected real growth for this sub-industry in 2020 is 16.18%, making its real market size grow from €8,645 million in 2019 to €10,043 million in 2020.

After forecasting each sub-industry market size, the next step was to forecast Nomad Foods' sub-industries. For this, it was used a logic based on its market share growth year after year, where

⁴ Raut, Reshma. 2020. "Impact of COVID-19 on the Frozen Ready Meals Market". Accessed November 21. <https://www.frozenfoodeurope.com/impact-of-covid-19-on-the-frozen-ready-meals-market/>

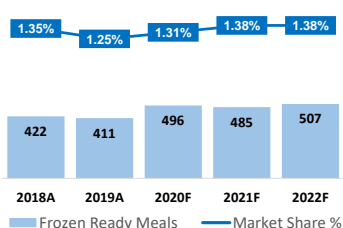
⁵ The Vegan Society. n.a.. "Statistics". Accessed October 21. <https://www.vegansociety.com/news/media/statistics#worldwidestatistics>

⁶ Ball, Jessica. 2019. "Fresh vs. Frozen Vegetables". Accessed November 16. <http://www.eatingwell.com/article/290575/fresh-vs-frozen-vegetables-are-we-giving-up-nutrition-for-convenience/>

⁷ Donnelly, Sarah. 2020. "Vegan Shoppers Drive Frozen Food Market Growth". Accessed December 5. <https://plantbasednews.org/lifestyle/food/vegan-frozen-food-boo/>

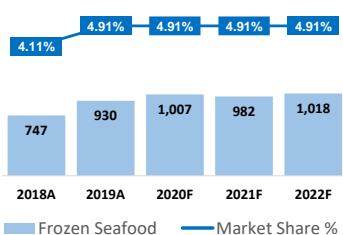
the growth has to do with the current politics the company is adopting regarding its investments in each of its product lines. Before going into detail on the forecast explanation, it is important to notice some assumptions were made, since the company does not discriminate its product revenues by sub-industry – instead, they discriminate it more thoroughly. With this, the company's frozen ready meals revenues include its revenues from frozen pizza, frozen ready meals, and frozen baked goods. Its revenues from frozen seafood include its revenues from frozen seafood only. Its revenues from meat and poultry include revenues from frozen red meat and frozen poultry. Its revenues from frozen vegetables and fruits include frozen vegetables, frozen fruit, and frozen meat substitutes. Finally, its revenues from frozen potatoes include revenues from the name itself, and the same happens in the frozen soup.

Figure 7 - Frozen Ready Meals
(€ million)



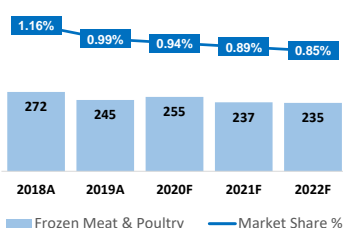
Starting with the frozen ready meals, the company's market share was 1.35% in 2018 and 1.25% in 2019. For 2020 and 2021, mostly due to the COVID-19 impact on the overall frozen ready meals market, Nomad Foods' market share is expected to grow by 5% each year, reaching 1.31% in 2020 and 1.38% in 2021. Besides the pandemic effect in its revenues, Nomad Foods' Goodfella's acquisition in 2018 is an important point in this forecast. Typically, acquisitions synergies tend to last for three years⁸, and that is why this 5% growth was forecasted until 2021. From 2021 onwards, it was assumed that the company's 1.38% market share would remain constant, as there was no strong reason to change this value.

Figure 8 - Frozen Seafood (€ million)



Regarding the frozen seafood market, its market share was 4.11% in 2018 and 4.91% in 2019. This is the company's core market in terms of revenues and the one where they are more recognized at a European level. Their established position in this market is due to its massive investment in 2015 when they acquired both the Findus Group and Iglo Foods. These brands are extremely well known in Europe due to their seafood products, with strong marketing campaigns to promote their products. As Nomad Foods is a company that is trying to broaden its core, investing in other segments, while keeping its presence in its main market, it was opted to maintain this segment's market share in perpetuity. Therefore, the 4.91% frozen share was used for the whole forecast.

Figure 9 - Frozen Meat & Poultry
(€ million)



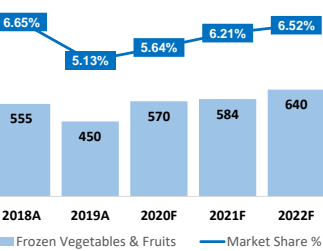
For the frozen meat and poultry segment, its market share was 1.16% in 2018 and 0.99% in 2019. The forecast from 2020 until 2024 is that the company loses market share in this segment. This decrease in the market share has not to do with the lack of variety or lack of quality within Nomad Foods products. Instead, this analysis consisted of researching for the consumption patterns among Europeans and, based on a Statista report⁹, it was possible to conclude that among the EU, the most developed countries (EU-15, comprising countries such as France, Germany, and Italy) are seeing their per capita meat consumption decrease over the last years, and this behavior is expected to be the same in the next decades, as there has been an increasing awareness for the harm that meat production causes in the world. On the other hand, the less developed European countries (EU-13, including countries such as Hungary, Poland, and Romania) are seeing their meat consumption per capita increase substantially over the last decade, and this pattern is expected to stay for the next decade. Therefore, as the majority of Nomad Foods' customers belong to the EU-15 list, it is expected the demand for this type of products to decrease, reducing the company's market share 5% each year until 2025, and assuming this last year's

⁸ Corporate Finance Institute. n.a.. "M&A Synergies". Accessed September 27. <https://corporatefinanceinstitute.com/resources/knowledge/valuation/mergers-acquisitions-ma-synergies/>

⁹ Statista. 2020. "Meat Trends In Europe". Retrieved from Statista database <https://www.statista.com/>

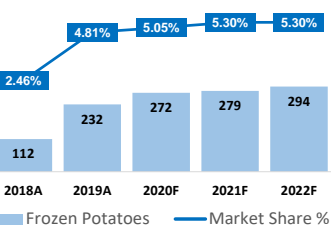
market share of 0.73% in the perpetuity.

Figure 10 - Frozen Vegetables & Fruits (€ million)



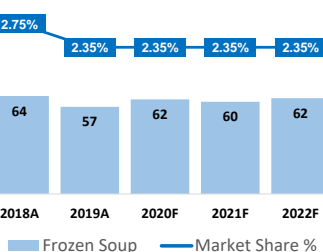
Regarding the frozen vegetables and fruits, a core part of the company's future, there are interesting topics to tackle. First of all, Nomad Foods' lost market share in this segment from 2018 to 2019, decreasing from 6.65% to 5.13%. However, in the current period, the company is trying to expand its core business, investing in the vegetables segment. With the launch of the Green Cuisine brand in mid-2019, Nomad Foods is putting a lot of confidence in its success, and the company's market is changing towards vegetable consumption. Nowadays, as stated before, meat consumption is decreasing among the company's core market (EU-15). On the other hand, there has been a considerable increase in the demand for frozen vegan food, mostly plant-based meat alternatives¹⁰. As one could already expect, Nomad Foods has been heavily investing in this segment, trying to keep up with the actual trends regarding frozen food consumption. The Green Cuisine brand, present in Iglo, Findus, and Birds Eye, comprises veggie burgers, veggie fingers, veggie bowls, and several individual products such as peas and broccoli. Its expansion has been evident over the last two years – at the beginning of 2020, it was present in two European countries and, nowadays, it is present in twelve countries¹¹ - more than meeting those that were the company expectations for the end of 2020, which were to be present in eight countries¹². Moreover, Nomad Foods' CEO has also stated in its 2020 Q2 results conference that this most recent brand will be present in all the company's markets by early 2021. As previously mentioned, today's consumers are mostly attracted by foods that are convenient, healthier, and with high-quality standards. Nomad Foods, with this Green Cuisine brand, is trying to fulfill all these aspects at once, developing high-quality food that is convenient to its consumers, while meeting the current consumption trends in its core activity markets. With this, Nomad Foods' market share is expected to grow from 5.64% in 2020 to 7.19% in 2024.

Figure 11 - Frozen Potatoes (€ million)



Going into the frozen potatoes sub-industry, Nomad Foods' market share was 2.46% in 2018 and 4.81% in 2019, an almost 100% increase from one year to the other. The explanation behind this is the acquisition of Aunt Bessie's in 2018, and therefore, the company's revenues were boosted between the two years. For 2020 and 2021, the synergies regarding this acquisition are expected to materialize. As stated before, synergies from an acquisition tend to last for three years, which is also the assumption for this segment. Allying this to the fact that the overall frozen food market benefited from the COVID-19 outbreak, it was opted to forecast this sub-industry market share growth at 5% for 2020 and 2021, reaching 5.05% in 2020 and 5.30% in 2021. From this period onwards, the company's market share remained constant at 5.30%, as there were no motives to specify any increase or decrease in the foreseeable future.

Figure 12 - Frozen Soup (€ million)



Finally, going into Nomad Foods' last segment, the frozen soup market, its market share was 2.75% in 2018 and 2.35% in 2019. In this specific segment, the company does not consider any further investments, relying on its products' quality to obtain very insignificant revenues. Given its relevance in the overall Nomad Foods' revenues (less than 2.5%) and the lack of data to make any assumptions, it was opted to keep this market share constant at 2.35% in the whole forecasted period.

¹⁰ Donnelly, Sarah. 2020. "Vegan Shoppers Drive Frozen Food Market Growth". Accessed December 5. <https://plantbasednews.org/lifestyle/food/vegan-frozen-food-boo/>

¹¹ Nomad Foods Ltd. 2020. Investors Day 2020: Who We Are & Where We Are Going. <https://www.nomadfoods.com/wp-content/uploads/2020/11/2.-who-we-are-where-we-are-going.pdf>

¹² Nomad Foods Ltd. 2020. CAGNY 2020: Annual Results. <https://www.nomadfoods.com/wp-content/uploads/2020/02/cagny-2020-presentation.pdf>

▪ Income Statement Forecast

In addition to the revenues, the income statement forecast also includes relevant accounts such as Cost of Sales, Other Operating Expenses, and Net Finance Cost.

Cost of Sales and Other Operating Expenses were forecasted as a percentage of revenues, as they are mostly tied with the company's sales, while the forecasting of Net Finance Cost was done based on the total amount of the previous year's debt.

Regarding cost of sales, there were no reasons to assume a higher or lower cost efficiency for the foreseeable future. Therefore, cost of sales was assumed to remain at 70% of revenues.

After breaking down Other Operating Expenses, it was possible to conclude that this is mainly driven by advertising and promotion, which was expected to decrease in 2020 due to COVID-19. Given that, with the pandemic impact, the company saw its sales increase exponentially and almost ran out of inventories, it was unnecessary to develop promotional programs and spend money on new advertising campaigns, as consumption promoted products by itself. On the other hand, in a normal scenario, Nomad Foods is expected to increase its advertising and promotion expenses during 2021 and 2022, mainly due to its new brand "Green Cuisine". This brand is Nomad Foods' latest investment, and promotion to its new product lines is needed to increase its reach.

Nomad Foods' financial results have been historically negative, and this trend is expected to remain in the future. The company's debt more than doubles its financial assets (€1,875 million against €779 million in 2019). At the same time, interests incurred in debt (mainly through bonds) are higher than the interests generated by financial assets (mainly through money markets). The average interest cost is close to 5% of debt, and the average interest income is close to 3% of cash and cash equivalents. Moreover, Fitch Ratings recently assigned Nomad Foods a first-time Long-Term Issuer Default Rating (IDR) of 'BB' (previously BB-) with a Stable Outlook¹³. Therefore, the estimated cost of debt is expected to decrease. On the other hand, due to the analysis made, Nomad Foods' Enterprise Value is expected to increase substantially, and so it will its debt. Thus, even though it is expected a decrease in the cost of debt, the overall amount of finance costs is expected to increase, as the amount of debt issued will increase considerably.

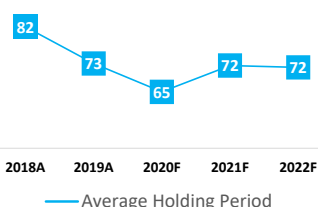
▪ Balance Sheet Forecast

To forecast the company's balance sheet, several assumptions were made, some of them using external sources, which will be explained in each caption.

Starting with the first caption, operating cash, the common acceptable assumption was used – 2% of the total revenues for that period. This was done not only for the historical period but also for the whole forecasting model.

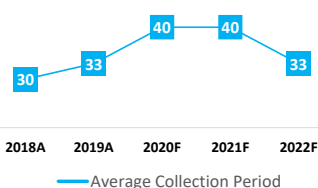
¹³ Fitch Ratings. 2020. "Fitch Assigns Nomad Foods First-Time 'BB' IDR; Stable Outlook". Accessed September 20. <https://www.fitchratings.com/research/corporate-finance/fitch-assigns-nomad-foods-first-time-bb-idr-stable-outlook-25-08-2020>

Figure 13 - Average Holding Period (days)



Going into the next caption, inventories, it was primarily computed Nomad Foods' average holding period, which has been decreasing over the last five years, from 176 days in 2015 to 73 days in 2019. For 2020, this number lowered to 65 days. The reason for this value is that, during the current pandemic, this company and many others struggled to produce the quantities the market was needing, due to the high demand that urged for either fresh, packaged, or frozen food. For 2021, the average holding period was increased again, to 72 days – assuming a return to the company's regular activity – and then forecasting it to decrease 0.5 days each year until 2025. This has to do with the expected improvement in Nomad Foods' operations management due to its business growth, which would translate into a higher distribution efficiency and better inventory management. From this period onwards, it was assumed the 2025 value to remain constant in perpetuity.

Figure 14 - Average Collection Period (days)



For trade and other receivables, the average collection period was computed. This value was not stable over the past five years, decreasing from 48 days in 2015 to 26 days in 2016, and increasing from that period onwards, being 33 days its value in 2019. Due to COVID-19's instability, it was opted to increase this value in 2020 and 2021, as Nomad Foods' clients might not be able to repay their obligations in due time. From this period onwards, 2019's average collection period was assumed.

Regarding trade and other payables, Nomad Foods' average payable period was computed. This value has been decreasing over the last five years, from 233 days in 2015 to 118 days in 2019. As there was no relevant information involving the company's relationship with its suppliers, whether improving it, whether deteriorating it, it was assumed the 2019 value as the one to remain in the perpetuity. The fact that the pandemic turned out to increase Nomad Foods' free cash flow also contributes to a safe relationship regarding its payments to suppliers.

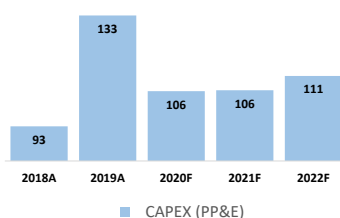
The last caption regarding the net working capital requirements, current tax payable was calculated as a percentage of the previous year's core taxes, as this was the most reasonable proxy for its forecast. This value has been increasing over the years due to the increase in Nomad Foods revenues' – therefore increasing core taxes – and, in 2019, current tax payables were 323% of the previous year's core taxes. As there was not much information regarding this caption, this percentage was kept constant in perpetuity.

Regarding the fixed assets part, and starting with the goodwill, this caption has shown slight increases over the last five years, growing from €1,677 million in 2015 to €1,862.9 million in 2019. The reasons for this increase are directly related to the acquisitions of both Aunt Bessie's and Goodfella's in 2018. Therefore, considering that the company's growth was assumed to be completely organic (without any acquisitions), the 2019 value was assumed to be kept constant throughout the whole forecasting period. The motives behind the assumption that Nomad Foods' growth is organic is due to the complexity around acquisitions. Forecasting acquisitions is a very sensitive subject, in which one would have to estimate the transaction volume, the premium paid, its period, and the synergies that would arise from this process.

Regarding intangible assets, their amortization was forecasted to be the last five years' average as a percentage of intangible assets. As for the intangible assets' CAPEX, it was assumed for the perpetuity the same value of 2019. This is directly related to the fact that the forecasting model does not imply any brands or companies' acquisitions.

Regarding PP&E, it was decided to segment it into four different parts – lands and buildings; plant and equipment; computer and equipment; and right-of-use assets. As for the land and buildings, no direct relationship with revenues is expected, so an average of the last three years was used. To reflect Nomad Foods' expansive vision, it was assumed this segment CAPEX to grow 5% each year.

Figure 15 - CAPEX PP&E (€ million)



CAPEX was assumed to be a percentage of revenues for both plant and equipment and computer and equipment. For the first one, it was considered a percentage of 2.50%, which is higher than its historical maximum, given the expected increase in production and distribution facilities due to Nomad's growth. For the latter, the historical average was assumed for 2020, which would then grow 10% each year due to R&D's expected investment to improve the quality of its products and the development of innovative product lines. Concluding the fixed assets, right-of-use assets were assumed to remain constant throughout the whole forecasting period.

The last item in the core business part was provisions, which were assumed to remain constant in perpetuity.

Regarding the non-core business, almost all its captions were assumed to remain constant, given its forecast complexity. The only exception was deferred tax assets, net of liabilities, which were forecasted as a percentage of the last year's revenue.

Concerning net financial obligations, starting with excess cash, it was forecasted as a percentage of net debt, in which its 2019's percentage was assumed to remain in perpetuity. Net debt's forecast is directly linked to Nomad Foods' capital structure, as it is the result of a circular reference between the company's target D/EV and E/EV ratios, and its forecasted enterprise value.

Continuing Value

Continuing value plays an essential role in any valuation due to the impact that small assumptions can have on the final output. With this, the most crucial outputs to obtain are the growth rate and the period forecast. To obtain these values, a growth analysis table was built, where several inputs were recorded. The last forecasted year is 2035, where the growth rate became stable. The growth rate was calculated seeing the NOPLAT's evolution from one year to another¹⁴. From 2030 onwards, this growth rate was stable at 1.89%, consistent with the revenues forecast, as the frozen foods industry revenues were assumed to grow at the expected real GDP growth rate (1.89%). As a cross-check, growth was also calculated by multiplying the reinvestment rate by the company's RONIC.

Discount Rates

The Discounted Cash Flows model was used as the main valuation method to value the company. The model itself requires the estimation of many parameters, which will be explained in the following paragraphs.

¹⁴ $g = \frac{NOPLAT_{t+1}}{NOPLAT_t}$

▪ Weighted Average Cost of Capital (WACC)

Table 1 - WACC

WACC	
Risk-free rate	0.93%
Expected Market Return	7.43%
Market Risk Premium	6.50%
Tax Rate	18.97%
β_e (old)	0.8963
β_d	0.3481
β_u	0.7123
β_e (New)	0.8336
R_d (Cost of Debt)	3.19%
R_e (CAPM)	6.35%
R_u	5.56%
WACC	5.41%
g	1.89%

The WACC is the cost of capital rate used to discount cash flows in the DCF model. Its calculation requires four inputs (cost of equity, cost of debt, tax rate, and the target D/E ratio). Moreover, it also requires consistency among many assumptions, which will also be further explained. The target D/E ratio assumed was 33.33%, which goes in line with the company's last year ratio. The tax rate used was 18.97% – the same as in 2019. To conclude, the final WACC¹⁵ obtained was 5.41%.

▪ Cost of Equity (R_e)

The first input to explain is the cost of equity, computed using the CAPM formula¹⁶. To use the CAPM, specific inputs were needed, such as the risk-free rate, the beta of equity, and the market risk premium. To proceed with the analysis, it was first necessary to reflect on what would be the approach regarding the inputs. For this, it was assumed the marginal investor (the one who is most likely to invest in the next trade) to be American, and this is because Nomad Foods' major shareholders are American investment companies, as mentioned in Shareholder Structure.

Table 2 - Nomad Foods Beta
95% Confidence Interval

Beta Confidence Interval	
β_e	0.83362
Standard Error	0.26948
z (95%)	1.96
n	60
Upper Limit	0.90181
Lower Limit	0.76543

For the risk-free rate, the value 0.93% was used, which was obtained by searching for the 10-year US government bond¹⁷, considering this as the best proxy for a risk-free investment. Market risk premium was assumed to be 6.50%, based on Damodaran¹⁸. Moreover, it was also needed the beta of equity, which was obtained by unlevering the old beta of equity – obtained by regressing Nomad Foods' monthly returns with the S&P500 monthly returns in the last ten years, and then adjust them according to the Adjusted Beta formula¹⁹. Unlevering the old beta of equity consists of doing a weighted average of both the rolling beta and the beta of debt based on the company's historical capital structure²⁰, excluding any tax shields, as it is not assumed Nomad Foods to have constant debt. The beta of debt was extrapolated using the CAPM formula²¹. Finally, the new beta of equity obtained using the formula with the target D/E ratio²² was 0.834. A 95% confidence interval was built based on the rolling beta standard deviation, which resulted in a range between 0.765 and 0.902.

▪ Cost of Debt (R_d)

Table 3 - Nomad Foods Cost of Debt

COST OF DEBT	
Yield to Maturity	3.25%
Credit Rating	BB/Ba2
Probability of Default	0.10%
Recovery Rate	42.87%
Cost of debt	3.19%

The cost of debt was obtained through the formula that requires as its inputs the yield to maturity, the probability of default, and the recovery rate²³. The first input – yield to maturity – was obtained by searching for the company's bonds in the market. Nomad Foods credit rating is BB – assigned by Fitch. Even though Fitch assigned this credit rating of BB, a conversion for the equivalent rating in Moody's classification is Ba2. The final cost of debt obtained was 3.19%.

¹⁵ $WACC = w_e * r_e + w_d * r_d * (1 - t)$

¹⁶ $r_e = r_f + \beta_e * MRP$

¹⁷ US Department of the Treasury. 2020. "Daily Treasury Yield Curve Rates". Accessed on January 1. <https://www.treasury.gov/resource-center/data-chart-center/interest-rates/pages/textview.aspx?data=yield>

¹⁸ Damodaran, Aswath. 2020. "Equity Risk Premiums (ERP): Determinants, Estimation and Implications – The 2020 Edition". Stern School of Business.

¹⁹ $Adjusted \beta = \beta_{old} * \left(\frac{2}{3}\right) + \frac{1}{3}$

²⁰ $\beta_{unlevered} = \beta_{equity} * \left(\frac{E}{E+D}\right) + \beta_{debt} * \left(\frac{D}{E+D}\right)$

²¹ $r_d = r_f + \beta_d * MRP$

²² $\beta_{equity} = \beta_{unlevered} + \left(\frac{D}{E}\right) * (\beta_{unlevered} - \beta_{debt})$

²³ $Cost\ of\ debt = YTM - Probability\ of\ default * (1 - Recovery\ rate)$

Valuation Methods

Discounted Cash Flows Model

Table 4 - Nomad Foods Estimated Share Price

SHARE PRICE	
Equity Value 31/12/2021 (€m)	4405.66
Shares Outstanding (million)	196.65
Estimated Share Price 31/12/2021 (EUR)	22.40
Forward Exchange Rate EUR/USD (31/12/2021)	1.2235
Estimated Share Price 31/12/2021 (USD)	27.41
Price as of 31/12/2020	25.42
% Change	7.83%

The DCF model was used to obtain Nomad Foods' expected share price at the end of 2021. To do this, all the unlevered free cash flows were discounted using the cost of capital mentioned before. In the last year, the continuing value formula was used, with a growth rate of 1.89%. Having the firm's core levered enterprise value, the next step was to sum to this number both the non-core book value and the company's net debt for 2021. After this, the expected equity value for the end of 2021 was obtained, and assuming the number of shares to be the same as the ones at the beginning of 2021, a final share price of \$27.41 was obtained.

It is important to clarify several assumptions regarding this analysis. Firstly, it was assumed the company's capital structure to be constant over the years, with a D/E ratio of 33.33%. Moreover, the non-core book value of the company was assumed to be its fair value. This assumption is strictly connected with the fact that Nomad Foods does not depend on these assets and liabilities to manage its business properly, neither do they represent a relevant weight in the overall company. The final aspect that is important to note is that the assumed growth rate was 1.89%, which is always a very sensible aspect in any analysis, subject to changes given the investor's perspective. For this reason, a sensitivity analysis was conducted.

Multiples Valuation

Regarding the multiple's valuation, it is important to point out that there are few pure peers compared to Nomad Foods, namely Orkla and Bonduelle. All the others operate in the frozen food industry, but their operations are dependent on many other businesses. For this reason, the multiples valuation was important to cross-check results obtained in the DCF model, but not as relevant as the latter due to some peers' business variety and complexity (Nestlé and Kraft Heinz).

Firstly, it was necessary to set what would be the parameters that would define a company as comparable or not. As Nomad Foods only operates in the European region, players who did not develop any kind of European activities were not considered. Moreover, it was only considered comparable companies that performed similar activities as Nomad Foods – frozen food. Finally, companies that presented specific financial characteristics that would make them outliers were also excluded, such as negative net debt and negative EBITDA.

With this set, based on the EV/EBITDA and EV/EBIT multiples, Nomad Foods share price would be \$34.10 and \$34.51, respectively. Based on the P/E ratio, the company's share price would be \$27.93.

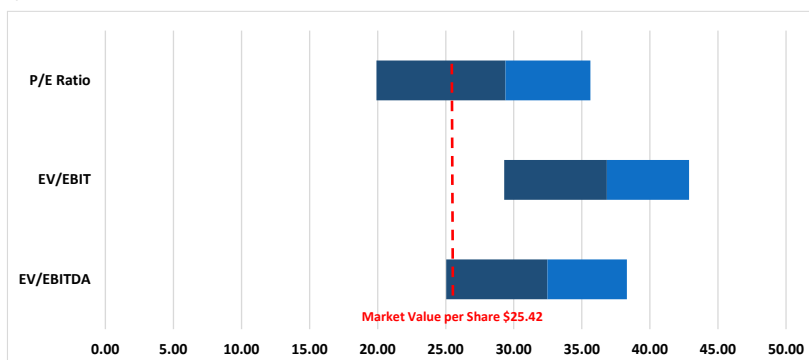


Figure 16 - Multiples Valuation Football Field

Sensitivity Analysis

Valuations can be highly sensitive to minor changes in assumptions. All the values obtained are subject to unpredictable outcomes that might occur in the future. A perfect estimate is almost impossible, and a range of results is needed to embrace several different valuation inputs. Therefore, a sensitivity analysis was conducted.

The first parameter analyzed was the growth rate. For this, it was performed a sensitivity analysis having as its variables both the RONIC and the RR. Both these numbers interval was computed with their last six years' average and standard deviation, resulting in a growth rate varying between 1.67% and 2.16%.

The second parameter analyzed was the WACC. The variables used were the cost of equity and the cost of debt. For the cost of equity, its range varied according to its peers' equity betas. For the cost of debt, its range varied according to Nomad Foods peers' cost of debt. With this, WACC varied between 4.69% and 5.81%.

To conclude, doing the final sensitivity analysis to its share price required both the WACC and growth rate as its variables. Both these parameters varied according to the standard deviations from the previous analysis. With this, it was obtained a range of share prices, being the minimum \$21.97, and the maximum \$41.97.

		WACC				
g		4.69%	4.97%	5.25%	5.53%	5.81%
	1.67%	35.45	31.22	27.65	24.60	21.97
	1.79%	36.87	32.36	28.59	25.38	22.62
	1.91%	38.42	33.60	29.59	26.21	23.31
	2.04%	40.12	34.95	30.68	27.10	24.04
	2.16%	41.97	36.40	31.85	28.05	24.83

Table 5 – Nomad Foods Share Price Sensitivity Analysis

Scenario Analysis

Several uncertainties may affect the company's operations and profitability, but one event already changed the “rules of the game” – COVID-19. The virus created a “new normal” in 2020 and, even though it is expected to be minimized during 2021 due to vaccine research and distribution, it is possible that this development will not be enough for the whole population, and governments will continue applying control measures to prevent the virus spread, namely national lockdowns.

Therefore, two alternative forecast scenarios were constructed. In one scenario (Scenario A), national lockdowns and social limitations will continue throughout 2021, while in the other – less likely – scenario (Scenario B), this “new normal” will continue until the end of 2022. As previously mentioned, these scenarios are less likely to happen, and thus, it was estimated a 65% probability for the Base Case Scenario, a probability of 30% to Scenario A, and a 5% probability to Scenario B.

As mentioned before, the base case scenario assumes the pandemic to be controlled during 2021. On the other hand, in Scenario A, lockdowns will stay until the end of 2021, and in Scenario B, they will remain until the end of 2022. The main differences within the three scenarios consist of: the different amount of revenues, as the longer the pandemic outbreak, the more Nomad Foods is expected to grow; lower average holding period, as the demand among consumers is likely to rise;

increased average collection period, as customers are more likely to fail their agreed obligations; fewer expenses with advertising, as the consumption would enhance the products' promotion by itself. The base case scenario results in a 7.83% expected return for the investor, while in Scenario A and Scenario B, this investor's expected return would be 9.72% and 14.10%, respectively.

Final Recommendation

Given all the analysis made throughout this equity report, it was reached a final expected share price for Nomad Foods of \$27.63. This price had into account a DCF model, which reflected a base-case scenario, and two scenarios that were built to reflect possible changes to the current world situation, namely the different impacts that COVID-19 can have in the next three years. Moreover, the sensitivity analysis also considers different perspectives that one investor can embrace when looking into this report, giving a share price range between \$21.97 and \$41.97.

In the end, Nomad Foods' share price turns out to be fair. The company has potential to grow, given its shifting investments into markets that are currently trending in the frozen food industry. Moreover, the fact that Nomad Foods was able to enhance its performance and business due to the "forced" need of its products, given the current worldwide circumstances, also supports possible future growth due to consumers' retention. However, an investor must have in mind the fact that this company's growth was heavily pushed by COVID-19, and its short-term growth is also contingent on the pandemic development, as customers might rapidly go from the need for frozen foods, to the desire of returning to restaurants and enjoy social moments that were forbidden for a long time. With this, the recommendation is to HOLD the position, and benefit from expected capital gains during 2021.

SCENARIOS					
	Scenario Probability	Price Target EUR	Price Target USD	Expected Return	Recommendation
Base Scenario	65%	22.40	27.41	7.83%	Hold
Scenario A	30%	22.80	27.89	9.72%	Hold
Scenario B	5%	23.71	29.00	14.10%	Buy
Weighted Average Price	100%	22.59	27.63	8.71%	Hold

Table 6 - Scenario Analysis Summary